The Portuguese version of the EORTC QLQ-C30

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P. FERREIRA

School of Economics, University of Coimbra (P)

SUMMARY

In this paper we report the results of a study aimed at translating and culturally validating the quality of life instrument QLQ-C30 initially developed by the European Organization for Research and Treatment of Cancer (EORTC).

We begin by mentioning the forward-backward translations process used to construct a Portuguese version semantically equivalent to the original version. After minor revisions, the instrument was pilot tested in fifteen patients with breast cancer. A brief description of the results of the pilot test with women with breast cancer and with other two studies (mastectomized women and women with lymphomas) is presented in this paper as well as the results of the comparison with the other generic and specific outcome instruments.

We conclude by referring the clinical relevance and the utility of the Portuguese version of the EORTC QLQ-C30 and by emphasizing the need for further evidence on the interpretability of the instrument.

INTRODUCTION

In the last few years the focus of measurement has been moving from the traditional biological indicators to more encompassing measures also including physical health, mental health and social health. We have been moving towards the concept of quality of life. Health related quality of life measures have been developed and validated in numerous situations and for several purposes.

The EORTC QLQ-C30 is a good example of a psychometrically robust measure especially designed by the European Organization for Research and Treatment of Cancer for evaluating the quality of life of patients participating in international clinical trials (Aaronson et al., 1993). In fact, in 1986, the EORTC decided to initiate a research program aimed at developing a core questionnaire with general questions about physical, emotional and social health and also specific questions related to symptoms suffered by cancer patients regardless of their more precise diagnostic. One year latter, a first version of that questionnaire was built and an international field testing was (Aaronson et al., 1991). After minor psychometric revisions, the final version with 30 questions was drawn, implemented and validated.

It is composed by nine multi-item scales (including five functional scales, one general quality of life scale and three general symptoms scales) and six single item scales corresponding to additional specific symptoms usually referred by cancer patients (Aaronson et al., 1987). Figure 1 presents the conceptual structure of these scales. This instrument constitutes a core questionnaire to be used with other more specific ones.

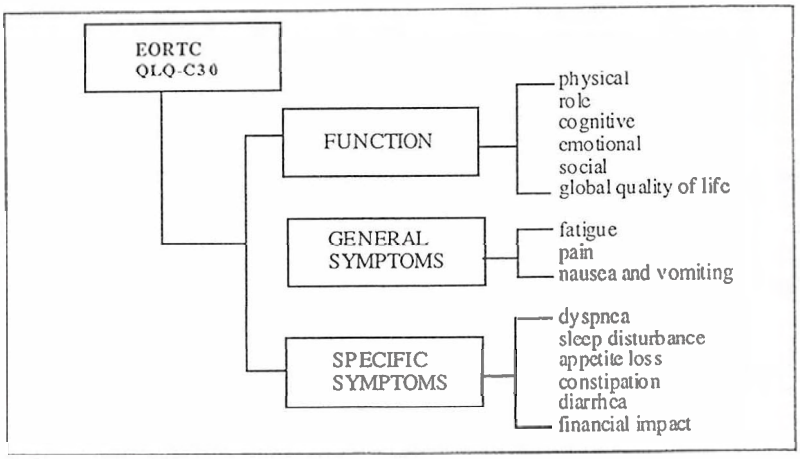

Fig. 1. Conceptual structure of the EORTC QLQ-C30

MATERIALS AND METHODS

The process of cultural adaptation to Portuguese followed three main steps

extensively explained elsewhere (Rosete e Ferreira, 1996). In the first step, we used the forward-backward translation procedure. The original questionnaire, written in English, was independently translated by two individuals, native speakers in Portuguese with a high level of fluency in English. Then, both forward translations were compared in a meeting with both translators and the National Coordinator (myself) and some disagreements were arbitrated. This process resulted in a provisional forward translation which was given to two native English speakers with a high level of fluency in Portuguese who independently performed the backtranslations. Both English translations were then compared by the National Coordinator who, before ending the meeting, showed the original English version to the translators and initiated a second discussion. Some revisions were made.

In a second step, the translated questionnaire was pilot-tested with 15 breast cancer patients who were present for consultation at the Ambulatory Unit of a Maternity. Because of some logistic constraints (lack of an available waiting room) we had to administer the questionnaire in a separate office. The patients were called by the nurse in charge of the ambulatory unit, were asked to fill the questionnaire and then were interviewed. The interviewer assessed, question by question, whether it had been difficult to answer, confusing, difficult to understand or whether the patient would have asked the question in a different way. Patients' general reactions to the pilot test were very good. A second version of the forward translation was finished after this pilot test.

Neil Aaronson, the main author of the instrument, and a specialist from the School of Medicine in Lisbon, commented on our report and finally agreed on the final modified version.

Several psychometric tests were performed. Among these we can emphasize the confirmation of the hypothesized scales by using the multi-method technique, the test of reliability (or internal consistency) through the use of the Cronbach's alpha

Table 1 — Means, standard deviations and reliability scores

	# of Items	Mean	SD	Cronbach's
Functioning scales				
PF — Physical	5	59.24	25.91	0.6862
RF — Role	2	64.56	33.16	0.4251
CF — Cognitive	2	68.57	30.55	0.6844
EF — Emotional	4	64.98	28.10	0.8687
SF — Social	2	78.48	23.89	0.7115
QL — Global quality of life	2	53.90	25.21	0.9132
Symptom scales and/or items				
FT — Fatigue	3	58.09	30.45	0.8659
NV — Nausea and vomiting	2	72.57	36.30	0.9193
PN — Pain	2	65.82	34.17	0.8905
DY — Dyspnea	1	84.39	27.65	
SD — Sleep disturbance	1	59.07	36.96	
AL — Appetite loss	1	68.35	37.33	
CP — Constipation	1	73.84	34.46	
DR — Diarrhea	1	97.89	8.17	
FI — Financial impact	1	77.64	32.35	

coefficient, and the test of the validity with the examination of the correlations among the various QLQ-C30 scales, the acceptability of patients and physicians, and the comparison of this instrument's results with the ones produced by other instruments. In the current paper we restrain our results to the descriptive and correlation statistics.

RESULTS AND CONCLUSIONS

We implemented this questionnaire in three groups of women: with lymphomas, mastectomized and with diagnosed breast cancer. Table 1 shows the means and standard deviations for the several scales as well as the reliability coefficients. Figures 2 and 3 represent the mean scores for the scales corresponding to each group of patients.

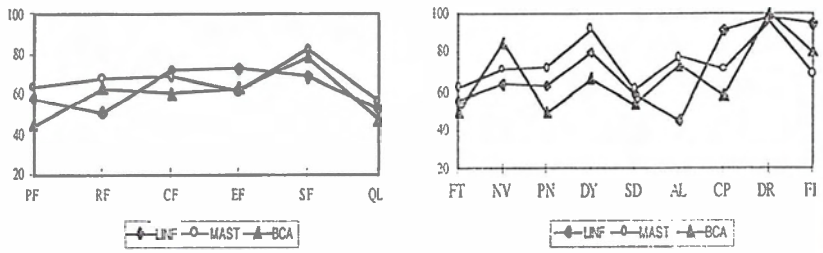

Figure 2 — Mean scores for three types of cancer patients

We also performed an ANOVA to detect how significant the differences of the three scores obtained for each scale were. We found that the scales PF, PN, DY, AL, CP and FI were statistically significant ($p<0.05$). These results show how sensitive this instrument is for the different kinds of cancer patients. The reliability coefficient ranged from 0.4251 for the RF scale to 0.9193 for the NV scale. This evidences the internal consistency of the instrument.

We conclude by referring the clinical relevance and the utility of the Portuguese version of the EORTC QLQ-C30 and emphasizing the need for further evidence on the interpretability of the instrument

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EORTC QLQ-C30
[VERSÃO PORTUGUESA]

Gostaríamos de conhecer alguns pormenores sobre si e a sua saúde. Responda, por favor, a todas as perguntas fazendo um círculo à volta do número que melhor se aplica ao seu caso. Não há respostas *certas* nem *erradas*. A informação fornecida é estritamente confidencial.

Escreva: As iniciais do seu nome .....
A data de nascimento (dia, mês, ano) .....
A data de hoje (dia, mês, ano) .....

	Não	Sim
1. Sente dificuldade quando faz esforços mais violentos, por exemplo, carregar um saco de compras pesado ou uma mala?	1	2
2. Custa-lhe andar a pé uma **grande** distância?	1	2
3. Custa-lhe andar a pé, fora de casa, uma **pequena** distância?	1	2
4. Tem de ficar na cama ou numa cadeira a maior parte do dia?	1	2
5. Precisa que o/a ajudem a comer, a vestir-se, a lavar-se ou a ir à casa de banho?	1	2
6. Sente-se de algum modo limitado/a para desempenhar o seu trabalho?	1	2
7. Está completamente incapacitado/a para desempenhar o seu trabalho ou tarefas domésticas?	1	2

Durante a última semana	Não	Um pouco	Bastante	Muito
8. Teve falta de ar?	1	2	3	4
9. Teve dores?	1	2	3	4
10. Precisou de descansar?	1	2	3	4
11. Dormiu mal?	1	2	3	4
12. Sentiu-se fraco/a?	1	2	3	4
13. Teve falta de apetite?	1	2	3	4
14. Teve enjoos?	1	2	3	4
15. Vomitou?	1	2	3	4
16. Teve prisão de ventre?	1	2	3	4

Durante a última semana	Não	Um pouco	Bastante	Muito
17. Teve diarreia?	1	2	3	
18. Sentiu-se cansado/a?		2	3	
19. As dores perturbaram as suas actividades diárias?		2	3	
20. Teve dificuldade em concentrar-se, por exemplo, para ler o jornal ou ver televisão?	1	2	3	4
21. Sentiu-se tenso/a?	1	2	3	4
22. Teve preocupações?	1	2	3	4
23. Sentiu-se irritável?	1	2	3	4
24. Sentiu-se deprimido/a?	1	2	3	4
25. Teve dificuldade em lembrar-se das coisas?	1	2	3	4
26. O seu estado físico ou tratamento médico interferiram na sua vida familiar?	1	2	3	4
27. O seu estado físico ou tratamento médico interferiram na sua actividade social?	1	2	3	4
28. O seu estado físico ou tratamento médico causaram-lhe problemas de ordem financeira?	1	2	3	4

Nas perguntas que se seguem faça um círculo à volta do número, entre 1 e 7, que melhor se aplica ao seu caso.

29. Como classificaria o seu estado físico em geral durante a última semana?

1	2	3	4	5	6	7
Péssimo						Óptimo

30. Como classificaria a sua qualidade de vida durante a última semana?

1	2	3	4	5	6	7
Péssima						Óptima